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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,768	01/17/2006	Bernhard Kohl	27133U	1474
34375 7590 12/13/2007 NATH & ASSOCIATES PLLC 112 South West Street Alexandria, VA 22314			EXAMINER POLANSKY, GREGG	
			ART UNIT	PAPER NUMBER
			1614	
			MAIL DATE	DELIVERY MODE
			12/13/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/564,768	Applicant(s) KOHL ET AL.	
	Examiner Gregg Polansky	Art Unit 1614	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10, 13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 8-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-5, 7, 13 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a)..  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/20/2006</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### Status of Claims

1. Applicants' preliminary amendments, filed 1/17/2006, canceling Claims 11-12, amending Claims 1-10, and adding new Claims 13-14, are acknowledged.
2. Applicants' Information Disclosure Statement, filed 4/20/2006, is acknowledged and has been reviewed.
3. Applicants' election of species with traverse in the reply filed on 10/11/2007 is acknowledged. Applicants' elected the following species:

Me = Magnesium;

PPI = Pantoprazole;

$x, y$ , and  $z = 1$ ;

Specific gastrointestinal disorder = Gastrointestinal lesions.

The traversal is on the grounds that the election requirement omitted "'an appropriate explanation' as to the existence of a 'serious burden' if the restriction were not required".

This is not found persuasive because, as stated in the Election Requirement:

The species listed do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: The species are drawn to a multitude of metal ions, pyridine-2-ylmethylsulphonyl-1H-benzimidazole compounds and combination ratios thereof and to a an undisclosed gastrointestinal disorder.

The search of these species is not co-extensive and would result in a serious search burden.

The requirement is still deemed proper and is therefore made FINAL.

4. Claims 6, and 8-10 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species,
5. Claims 1-5, 7, 13, and 14 are presently under consideration.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-5, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Cui et al. (Chinese Patent Publication No. 1367172, Abstract only).

Cui et al. teach magnesium salts of [(substituted pyridyl)methyl]sulfinyl-1H-benzimidazole derivatives, including pantoprazole, and that they can be used as proton pump inhibitors. Cui et al. teach the preparation of these compounds involves dissolving the [(substituted pyridyl)methyl]sulfinyl-1H-benzimidazole compound in alkaline aqueous solution adjusted to pH 9-13, followed by the drop-wise addition of a water-soluble magnesium salt solution (e.g.,  $\text{MgCl}_2$  or  $\text{Mg}(\text{NO}_3)_2$ ) and the precipitated collected. The instant Specification discloses the compound of formula pantoprazole<sup>-</sup>  $\text{OH}^- \text{Mg}_2^+ \text{H}_2\text{O}$  (the elected species) as being prepared by the same reaction. Absent evidence to the contrary, the compound formed by the reaction taught by Cui et al. would have produced the same compound disclosed in the instant Specification and

Claims. It is noted that *In re Best* (195 USPQ 430) and *In re Fitzgerald* (205 USPQ 594) discuss the support of rejections wherein the prior art discloses subject matter, which there is reason to believe inherently includes functions that are newly cited, or is identical to a product instantly claimed. In such a situation the burden is shifted to the applicants to "prove that subject matter to be shown in the prior art does not possess the characteristic relied on" (205 USPQ 594, second column, first full paragraph. There is no requirement that a person of ordinary skill in the art would have recognized the inherent disclosure at the time of invention, but only that the subject matter is in fact inherent in the prior art reference. *Schering Corp. v. Geneva Pharm. Inc.*, 339 F.3d 1373, 1377, 67 USPQ2d 1664, 1668 (Fed. Cir. 2003); see also *Toro Co. v. Deere & Co.*, 355 F.3d 1313, 1320, 69 USPQ2d 1584, 1590 (Fed. Cir. 2004) ("[T]he fact that a characteristic is a necessary feature or result of a prior-art embodiment (that is itself sufficiently described and enabled) is enough for inherent anticipation, even if that fact was unknown at the time of the prior invention").

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1-5, 7, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cui et al. (Chinese Patent Publication No. 1367172, Abstract only), in view of Kohl (U.S. Patent No. 6,410,569 B1).

The teachings of Cui et al. have been presented *supra*.

Kohl teaches a pharmaceutical composition of pantoprazole magnesium dihydrate and its use in a method of treating amenable disorders of the stomach or intestine. See column 4, claims 1, 2, and 8. Kohl teaches the increased stability of the magnesium salts of pantoprazole. See column 1, last paragraph. Indeed, Kohl presents evidence of the stability of the magnesium pantoprazole salt that is comparable to that presented in the instant Specification. See Kohl reference, column 3, 1<sup>st</sup> paragraph, and instant Specification, page 5, lines 14-18.

One of ordinary skill in the art at the time of the invention would have known that proton pump inhibitors were useful for the treatment of disorders of the gastrointestinal system and that effective compounds must be formulated with pharmaceutically acceptable auxiliary agents (e.g. carriers, diluents, disintegrants, etc.). The artisan would have found it obvious to combine the teachings of the two references cited

above, motivated by the need to make pharmaceutical compositions of pantoprazole, having greater stability, for use in treating gastrointestinal disorders.

A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill in the art might reasonably infer from the teachings. (*In re Opprecht* 12 USPQ 2d 1235, 1236 (Fed Cir. 1989); *In re Bode* 193 USPQ 12 (CCPA) 1976). In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a). From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole is *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

### ***Conclusion***

11. Claims 1-5, 7, 13, and 14 are rejected.
12. No claims are allowed.
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregg Polansky whose telephone number is (571) 272-9070. The examiner can normally be reached on Mon-Thur 8:30 A.M. - 7:00 P.M. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on (571) 272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gregg Polansky

*Phyllis Spivack*  
PHYLLIS SPIVACK  
PRIMARY EXAMINER 12/7/07